

31. A data entry system comprising a hand held data entry unit, said hand held unit comprising:

a reading sensor for sensing commands and/or data and for producing input signals in response to said sensed commands and/or data;

rewritable storage programmable with information relating to a plurality of items, user selectable by means of said reading sensor;

a controller connected to receive and process said input signals from said sensor, said controller being arranged to respond to said commands to control said hand held unit and to said data to select a said item; and

a display screen for displaying a user readable representation of said commands and said stored information for said selected item;

and said system further comprising:

a telecommunications interface for telephonic transmission of information relating to a selected item or items from said storage to a remote processing centre via a telecommunications network and for telephonic reception of information relating to selectable items from said remote processing centre to said storage via said telecommunications network, said controller being responsive to a said command to cause downloading of information from said remote processing centre as required for updating information previously stored in said rewritable storage for selectable items.

- 32. A data entry system according to claim 31, wherein said telecommunications interface is integral to said hand held unit and directly connects said hand-held unit to said telecommunications network.
- 33. A data entry system according to claim 31, wherein said hand held unit includes a rechargeable power source, means being provided for recharging said power source.
- 34. A data entry system according to claim 31, wherein said telecommunications interface is an interface for direct connection to a wireless telecommunications network.

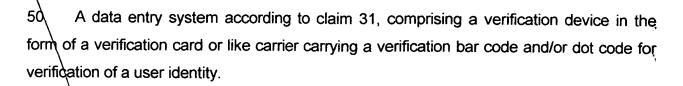


- 35. A data entry system according to claim 31, wherein said telecommunications interface is a cellular telephone network interface.
- 36. A data entry system according to claim 31, wherein said telecommunications interface is a satellite interface and said telecommunications network is a satellite telecommunications network.
- Cont
- 37. A data entry system according to claim 31, wherein said telecommunications interface includes a modern.
- 38. A data entry system according to claim 31, wherein said hand held unit comprises one or two manually operable switches for scrolling said display in a first and/or second direction for selectively displaying information for respective selectable or selected items from said storage.
- 39. A data entry system according to claim 38, wherein operation of said first and/or second switches in predetermined operational states of said hand held unit causes predetermined functions other than scrolling functions to be performed.
- 40. A data entry system according to claim 31, wherein said display comprises a touch sensitive screen, said controller being arranged to display a menu of user selectable items and to be responsive to a location at which said screen is touched for input of a user selection of a said menu item.
- 41. A data entry system according to claim 31 comprising a reading sensor for reading coded data, wherein said controller is arranged to access the stored information for selectable items to determine natural language characters or images corresponding to the coded data for display.
- 42. A data entry system according to claim 41, wherein said coded data comprises bar codes and/or binary dot codes and said sensor is a bar code and/or dot code reader.



43. A data entry system according to claim 31, wherein said reading sensor is a camera.

- 44. A data entry system according to claim 31, wherein said controller is user programmable to cause said captured data to be displayed on said display either in a first orientation suitable for reading displayed data when said hand held unit is held in a user's right hand, or in a second orientation suitable for reading displayed data when said hand held unit is held in a user's left hand, said controller being responsive to user programming operations including scanning of an appropriate command code using said reading sensor.
- 45. A data entry system according to claim 31, wherein said hand held unit includes a speaker and/or microphone and switching means permitting said hand held unit to be used as a telephone handset.
- 46. A data entry system according to claim 31, wherein said hand held unit is configured as an elongate unit such that it may be held by a user in the manner of a pen or quill with said reading sensor being located in a reading head at or adjacent to one end of said hand held unit.
- 47. A data entry system according to claim 31, wherein said reading sensor is located in a reading head which is releasably attached to said hand held unit.
- 48. A data entry system according to claim 31 additionally comprising, separate from said hand held unit:
- means for displaying a plurality of selectable items with associated data sources for user selection of an item by operation of said hand held unit; and
- a remote processing centre for processing user selections transmitted from said hand held unit.
- 49. A data entry system according to claim 31, wherein programs in said hand held unit are updatable remotely from said processing centre.



Cont

- Adata entry system according to claim 31, comprising a carrier for a plurality of data and/or command codes for association with means for displaying a plurality of selectable items, wherein said carrier carries a plurality of codes, each for a respective one of a plurality of natural language and/or numeric characters and a plurality of commands for controlling operation of said data entry or merchandising system, each code being associated with a visual representation of the corresponding natural language or numeric character or command and/or of a graphical representation thereof.
- 52. A data entry system according to claim 51, wherein said codes are bar and/or dot codes and/or other product identifications.
- 53. A data entry system comprising a hand held data entry unit, said hand held unit comprising:

a reading sensor for sensing commands and/or data and for producing input signals in response to said sensed commands and/or data;

rewritable storage programmable with information relating to selectable items;

a controller connected to receive and process said input signals from said sensor, said controller being arranged to respond to said commands to control said hand held unit and to said data to select a said item;

a display screen for displaying a user readable representation of said commands and said stored information for said selected item; and

a telecommunications interface for telephonic transmission of information relating to a selected item or items from said storage to a remote processing centre via a telecommunications network and for telephonic reception of information relating to said selectable items from said remote processing centre to said storage via said telecommunications network, wherein said telecommunications interface is a

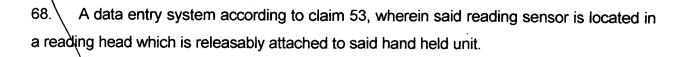
telecommunications line interface integral to said hand held unit and directly connects said hand-held unit to said telecommunications network.

Cont

- 54. A data entry system according to claim 53, wherein said hand held unit includes a rechargeable power source, means being provided for recharging said power source.
- 55. A data entry system according to claim 53, wherein said telecommunications interface is an interface for direct connection to a wireless telecommunications network.
- 56. A data entry system according to claim 53, wherein said telecommunications interface is a cellular telephone network interface.
- 57. A data entry system according to claim 53, wherein said telecommunications interface is a satellite interface and said telecommunications network is a satellite telecommunications network.
- 58. A data entry system according to claim 53, wherein said telecommunications interface includes a modern.
- 59. A data entry system according to claim 53, wherein said hand held unit comprises one or two manually operable switches for scrolling said display in a first and/or second direction for selectively displaying information for respective selectable or selected items from said storage.
- 60. A data entry system according to claim 59, wherein operation of said first and/or second switches in predetermined operational states of said hand held unit causes predetermined functions other than scrolling functions to be performed.



- A data entry system according to claim 53, wherein said display comprises a touch sensitive screen, said controller being arranged to display a menu of user selectable items and to be responsive to a location at which said screen is touched for input of a user selection of a said menu item.
- 62. A data entry system according to claim 53 comprising a reading sensor for reading coded data, wherein said controller is arranged to access the stored information for selectable items to determine natural language characters or images corresponding to the coded data for display.
- 63. A data entry system according to claim 62, wherein said coded data comprises bar codes and/or binary dot codes and said sensor is a bar code and/or dot code reader.
- 64. A data entry system according to claim 53, wherein said reading sensor is a camera.
- 65. A data entry system according to claim 53, wherein said controller is user programmable to cause said captured data to be displayed on said display either in a first orientation suitable for reading displayed data when said hand held unit is held in a user's right hand, or in a second orientation suitable for reading displayed data when said hand held unit is held in a user's left hand, said controller being responsive to user programming operations including scanning of an appropriate command code using said reading sensor.
- 66. A data entry system according to claim 53, wherein said hand held unit includes a speaker and/or microphone and switching means permitting said hand held unit to be used a telephone handset.
- 67. A data entry system according to claim 53, wherein said hand held unit is configured as an elongate unit such that it may be held by a user in the manner of a pen or quill with said reading sensor being located in a reading head at or adjacent to one end of said hand held unit.





- 69. A data entry system according to claim 53, additionally comprising, separate from said hand held unit:
- means for displaying a plurality of selectable items with associated data sources for user selection of an item by operation of said hand held unit; and
- a remote processing centre for processing user selections transmitted from said hand held unit.
- 70. A data entry system according to claim 53, wherein programs in said hand held unit are updatable remotely from said processing centre.
- 71. A data entry system according to claim 53, comprising a verification device in the form of a verification card or like carrier carrying a verification bar code and/or dot code for verification of a user identity.
- 72. A data entry system according to claim 53, comprising a carrier for a plurality of data and/or command codes for association with means for displaying a plurality of selectable items, wherein said carrier carries a plurality of codes, each for a respective one of a plurality of natural language and/or numeric characters and a plurality of commands for controlling operation of said data entry or merchandising system, each code being associated with a visual representation of the corresponding natural language or numeric character or command and/or of a graphical representation thereof.
- 73. A data entry system according to claim 72, wherein said codes are bar and/or dot codes and/or other product identifications.



Ins B,

74. A merchandising system comprising a data entry system according to claim 48, wherein:

- said selectable items are merchandisable items; and
- said remote processing sentre initiates processing of user orders of said selectable merchandisable items.
- 75. A merchandising system comprising a data entry system according to claim 69, wherein:
- COA
- said selectable items are merchandisable items; and
- said remote processing centre initiates processing of user orders of said selectable merchandisable items.

Date: April 2, 1996

SHARP, COMFORT & MERRETT 13455 Noel Rd. Suite 1710 LB-14

Dallas, Texas 75240-6636

DOCKET: 5003A/PCT/US

(214) 490-3698

Respectfully submitted,

N. Rhys Merrett

Registration No. 27250